Project - Machine Learning based Vehicle Performance Analyzer

TEAM ID - PNT2022TMID10506

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

Who is your customer?
i.e. working parents of 0-5 y.o. kids

The customer is one who wants to predict the performance of the vehicle.

6. CUSTOMER CONSTRAINTS — CC

What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices.

- To determine the worthiness of the car by their own within few minutes
- A loss function is to be optimized by spending money for dealers,brokers to buy or sell a car.

5. AVAILABLE SOLUTIONS — AS

Which solutions are available to the customers when they face the problem
or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking

- In the past User cannot find the value of used car buy their own without prior knowledge about cars.
- A person who don't know much about the car can also make predictions for used cars easily.

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

To build a supervised machine learning model using regression algorithms for forecasting the value of a vehicle based on multiple attributes such as Condition of Engine, Year of Registration, Kilometers, Number of Owner

9. PROBLEM ROOT CAUSE — RC

What is the real reason that this problem exists?
What is the back story behind the need to do
this job?
i.e. customers have to do it because of the change in regulations.

- The price predicted by the dealers or brokers for used car is not trustful
- Users can predict the correct valuation of the car remotely without human intervention like car dealers.
- User can eliminate the valuation predicted by the dealer.

7. BEHAVIOUR — BE

What does your customer do to address the problem and get the job done?
i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

The History of Your Car's condition and documents produced by them will be Suspicious. The model is to be built would give the nearest value of the vehicle by eliminating anonymous value predicted by using humans.

Focus on J&P, tap into BE, understand RC

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Identify strong TR & EM

3. TRIGGERS TR

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

Users can predict the correct valuation of the car by their own like Olxcars, Cars24 and other car resale value prediction websites by using model,year,owner,etc

10. YOUR SOLUTION SL

If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality.
If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.

• The main aim of this project is to predict the price of used cars using the Machine Learning(ML) algorithms and collection data's about different cars.

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE

What kind of actions do customers take online? Extract online channels from #7

8.2 OFFLINE

What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

- Customer should predict the worth of the car by using different parameters given by the owner.
- User Should confirm the details provided about the vehicle in RTO online.

Identify strong TR & EM

4. EMOTIONS: BEFORE / AFTER EM

How do customers feel when they face a problem or a job and afterwards?
i.e. lost, insecure > confident, in control - use it in your communication strategy & design

Before:

- User will be in fear about the biased values predicted by the humans based on the condition of the car.

After:

- User can determine the worthiness of the car by their own without human intervention.

• The project should take parameters related to used car as inputs and enable the customers to make decisions by their own.

- User can decide by seeing the exterior and interior condition of the car.
- User can test the performance of the car and to buy it up in a affordable price based on its condition.